

In the Specification:

Please delete the current Sequence Listing and insert therefor the attached new Paper Sequence Listing.

Please amend the paragraph at page 9, lines 7-12, as follows:

Figure 3 shows the nucleotide sequence of different clones derived from peripheral blood mononuclear cells (PBMC) from swine leukocyte antigen (SLA) inbred miniature swine. numbered 12002 with seven (7) different clones being generated (numbered 1 through 7 in panels 3(a) through 3(g), designated 12002-1 (SEQ ID NO: 1), 12002-2 (SEQ ID NO: 2), 12002-3 (SEQ ID NO: 3), 12002-4 (SEQ ID NO: 4), 12002-5 (SEQ ID NO: 5), 12002-6 (SEQ ID NO: 6), and 12002-7 (SEQ ID NO: 7), respectively. The preparation of these clones is described in Example 4.

Please amend the paragraph at page 9, lines 14-19, as follows:

Figure 4 shows the results of a comparison of the nucleotide sequences of the seven clones generated as per example 4 and with the sequences shown in Figure 3 designated 12002-1 (SEQ ID NO: 1), 12002-2 (SEQ ID NO: 2), 12002-3 (SEQ ID NO: 3), 12002-4 (SEQ ID NO: 4), 12002-5 (SEQ ID NO: 5), 12002-6 (SEQ ID NO: 6), and 12002-7 (SEQ ID NO: 7). Clone 12002-1 exhibits a single nucleotide difference from the other clones at position 349. While this sequence may reflect another variant of the PERV sequence it is also possible that it is an artifact from the cloning or sequencing procedures.

Please amend the paragraph at page 9, lines 21-26, as follows:

Figure 5 shows the nucleotide sequence of different clones derived from peripheral blood mononuclear cells (PBMC) from swine leukocyte antigen (SLA) inbred miniature swine numbered 11619 with nine (9) different clones being generated (numbered 1 through 9 in panels 6(a) ~~5(a)~~ through 6(i) ~~5(i)~~ designated 11619-1 (SEQ ID NO: 8), 11619-2 (SEQ ID NO: 9), 11619-3 (SEQ ID NO: 10), 11619-4 (SEQ ID NO: 11), 11619-5 (SEQ ID NO: 12), 11619-6 (SEQ ID NO: 13), 11619-7 (SEQ ID NO: 14), 11619-8 (SEQ ID NO: 15), and 11619-9 (SEQ ID NO: 16), respectively. The preparation of these clones is described in Example 4.

Please amend the paragraph starting at page 9, line 28, as follows:

Figure 6 is a comparison of the nucleotide sequences of the seven clones generated as per example 4 and with the sequences shown in Figure 5. All sequences analyzed are of the PERV-AH2 type. Shown are a number of sequences and their alignments for these clones (designated 11619-1 (SEQ ID NO: 8), 11619-2 (SEQ ID NO: 9), 11619-3 (SEQ ID NO: 10), 11619-4 (SEQ ID NO: 11), 11619-5 (SEQ ID NO: 12), 11619-6 (SEQ ID NO: 13), 11619-7 (SEQ ID NO: 14), 11619-8 (SEQ ID NO: 15), and 11619-9 (SEQ ID NO: 16)) which have been studied in detail from the beginning of the envelope gene to the VRB region.

Please amend Table 3, starting at page 26, line 12, as follows:

**Table 3. PCR Primers used to Amplify C-Type PERVs**

Name	Forward /Reverse (+/-)	Sequence (5' to 3')	Length	Tm	GC%	Position PERV-A AF038601	Position PERV-B Y17013	Position PERV-C AF038600
JWF-1	+	CTAGGAGGATCACAGGCTGC (SEQ ID NO: 19)	20	64	60	352 - 371	14 - 33	339 - 358
JWF-2	+	CCTGGTGGTCTCCTACTGTCG (SEQ ID NO: 20)	21	66	62	414 - 434	76 - 96	401 - 421
JWF-3	+	GTGTGTCTGGATCTGTTGGTTTC (SEQ ID NO: 21)	23	65	48	529 - 551	191 - 213	516 - 538
JWF-4	+	TGCCTGCTTGTGGAAGACG (SEQ ID NO: 22)	19	68	59	498 - 516	160 - 178	485 - 503
JWR-5	-	GCTTTTATGGGGTTCACAACAAA (SEQ ID NO: 23)	23	66	39	7220 - 7198	7762 - 7740	8021 - 7999
JWR-6	-	CCACGCAGGGGTAGAGGACT (SEQ ID NO: 24)	20	67	65	7266 - 7247	7808 - 7789	8067 - 8048

Please amend Table 5, starting at page 29, line 25, as follows:

**Table 5.**

Name	Specificity	Forward/Reverse (+ / - )	Sequence (5' to 3')
PERVAF	PERV-A	+	CCT ACC AGT TAT AAT CAA TTT AAT TAT GGC (SEQ ID NO: 25)
PERVAR	PERV-A	-	AGG TTG TAT TGT AAT CAG AGG GG (SEQ ID NO: 26)
JWFAN1	PERV-A,B,C	+	CGT GGT TCC TTA CTC TGT CAA TAA CTC (SEQ ID NO: 27)
JWFAN2	PERV-A,B,C	+	CTA ATG ATG GGA ATT GGA AAT GG (SEQ ID NO: 28)
JWFAN4	PERV-A,B,C	+	GCT TAC CCT TAC TGA GGT TTC TGG (SEQ ID NO: 34)
JWFAN5	PERV-A,B,C	+	GGA CTT AGT AAC CTA CAT CGA ATT GTA AC (SEQ ID NO: 30)
JWRENV4	PERV-A,B,C	-	CCA ACA AGA AGA GGT AGC CTC TG (SEQ ID NO: 31)
JWRENV5	PERV-A,B,C	-	GGA TCT TCC GTT ACA ATT CGA TGT AG (SEQ ID NO: 32)
DA 185	PERV-A,B,C	-	TCT CGT ACT TTT TGA CCA CAC CAA CG (SEQ ID NO: 33)